

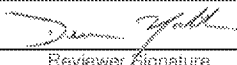


Site Visit – Safe Work Plan

(Americas)

CAUTION: This Site Visit Safe Work Plan (SV-SWP) template is intended for low risk site visits only. It is only appropriate if the scope of work is limited to driving, walking, taking notes, and taking photographs. It should not be used if the conditions at the site being visited are hazardous or high risk. Use at an active construction site is acceptable if escorted by the Client or General Contractor (or similar). If any physical work beyond this limitation is planned, review the DCS Americas SH&E page for alternative templates.

Project Name:	TRW Microwave	
Project Number (incl. Task Code)	60607385-D4	
Approval: Print Project Manager name & phone number, sign and date		
Holly Holbrook, 562-577-6058		August 16, 2021
Approval Project Manager Name and Phone Number	Approval Project Manager Signature	Approval Date
Personnel: Print all personnel making the site visit, print names & phone number and sign		
Holly Holbrook, 562-577-6058		Escort Required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide name and company TBD – Apple, Inc.
NA	Personnel Signature	
Personnel Name and Phone Number	Personnel Signature	
NA	Personnel Signature	
Personnel Name and Phone Number	Personnel Signature	
Reviewer: Print SH&E POC name & phone number, sign and date		
Devon Molitor, 858-531-9666		August 16, 2021
Reviewer Name and Phone Number	Reviewer Signature	Review Date
<p><u>Report ALL SHE incidents, no matter how minor, to the Incident Hotline: 800-348-5046.</u></p> <p>This reporting includes any vehicle incident, any injury or illness potentially related to a project including minor injuries that may or may not require first aid, fires, theft, regulator inspections, environmental releases, etc. See Attachment A for more information regarding incident reporting and response. All potential coronavirus cases must be reported to the Area SH&E Manager. Symptoms of the coronavirus and response requirements are included in Attachment A.</p> <p>Identify the nearest Occupational Clinic and Hospital to the site that accepts AECOM Workers Compensation Insurance (see Attachment A for instructions). If the nearest such clinic or hospital is an unreasonable distance from the site, identify closer hospitals or clinics. Attach maps and directions to the clinics and hospitals in Attachment A.</p>		
Nearest Occupational Clinic:	Concentra Medical Center	Phone Number: 408-228-8400
Address:	2737 Walsh Avenue, Santa Clara, CA 95051	Hours of Operation: 8 AM – 5 PM
Nearest Hospital:	Kaiser Foundation Hospital	Phone Number: 408-851-5300
Address:	700 Lawrence Expressway, Santa Clara, CA 95051	Hours of Operation: 24-hrs
Minimum Personal Protective Equipment (Note: If any PPE beyond that listed is required, do not use this template)		
<input type="checkbox"/> First Aid Kit <input type="checkbox"/> Gloves: NA <input type="checkbox"/> Insect Repellent <input type="checkbox"/> Flame Resistant Clothing <input type="checkbox"/> Sunscreen <input type="checkbox"/> Hearing Protection		
Mandatory: <input checked="" type="checkbox"/> Hard Hat <input checked="" type="checkbox"/> Reflective Vest <input checked="" type="checkbox"/> Foot Protection <input checked="" type="checkbox"/> Safety Glasses		

Training	
<input type="checkbox"/> OSHA 10-hour Construction <input type="checkbox"/> Defensive Driving (required for any driver)	<input type="checkbox"/> Annual AECOM field safety training (All Workers) <input type="checkbox"/> 2021 Core SH&E Courses on AECOM U
List any other client or site required training and any specialized training: N/A	
SH&E Technology Used to Mitigate Hazards:	
<input type="checkbox"/> Wearable Technology/Smart PPEs <input type="checkbox"/> Vehicle related Technology <input type="checkbox"/> Phone/tablet applications or software: N/A <input checked="" type="checkbox"/> Other: N/A	<input type="checkbox"/> Ergonomics Technology <input type="checkbox"/> Connected worksites <input type="checkbox"/> Virtual Reality (VR) or Augmented Reality (AR) <input type="checkbox"/> Site Sensors <input type="checkbox"/> GPS - Location devices
Find available technologies and/or share the technology you will be using in the AECOM Technology Toolbox or let us know what would be interesting to assess by clicking here .	
Worker Check-in/Check-out Procedure:	
A single AECOM worker will be onsite and will check in with the Project Director when entering and leaving the site.	
SITE INFORMATION AND SCOPE OF WORK	
Site Description:	The site is an occupied office building.
General Public:	Not applicable. The site walk will take place within an office building
Client or Third-Party / Contractor Operations	The client, Northrop Grumman, and USEPA will attend the site visit.
Scope of Work	The site walk will consist of meeting with USEPA and the client and looking at previous indoor air sampling locations and potentially looking a vent protrusions on the roof of the building. Access to the roof will be through permanently mounted ladders within the building. It is our understanding that the ladders have fall protection cages above 6 feet.
PRE-VISIT HAZARD IDENTIFICATION AND CONTROLS	
Identify the top hazards most likely to result in serious injury or fatality that may occur during the visit and discuss mitigations. Review the THAs for more detail.	
Hazard:	Mitigations:
<input checked="" type="checkbox"/> Roof Access	<input checked="" type="checkbox"/> Use only permanently-mounted ladders <input checked="" type="checkbox"/> Maintain three points of contact <input checked="" type="checkbox"/> Wear appropriate footwear <input checked="" type="checkbox"/> Avoid edges
<input checked="" type="checkbox"/> Travel to and from site	<input checked="" type="checkbox"/> Follow defensive driving practices.
In addition to the coronavirus precautions below, identify the top lesser hazards most frequently anticipated to occur during the visit (i.e., insects, heat, trip hazards, etc.) – Review the THAs for more detail.	
Hazard:	Mitigations:
<input checked="" type="checkbox"/> Slip and Trip hazards	<input checked="" type="checkbox"/> Be observant of surroundings and wear proper footwear.
<input checked="" type="checkbox"/> Exposure to Coronavirus	<input checked="" type="checkbox"/> AECOM recommends all employees obtain a Coronavirus vaccine. <input checked="" type="checkbox"/> Plan your travel to and from the worksite in accordance with local condition; consider the least crowded transportation method, limit vehicle occupancy, and time of day. <input checked="" type="checkbox"/> If unvaccinated, while working, maintain a six-foot distance from others (social distancing) and wear a face mask (if working with others).
<input checked="" type="checkbox"/> Spreading Coronavirus	<input checked="" type="checkbox"/> AECOM recommends all employees obtain a Coronavirus vaccine. <input checked="" type="checkbox"/> If unvaccinated, while working, maintain a six-foot distance from others (social distancing) and wear a face mask (if working with others). <input checked="" type="checkbox"/> If exposed to a known Coronavirus case or diagnosed with Coronavirus, do not report to work (office, field site). Contact your, supervisor and AECOM Area, Business Line, or Regional SH&E Manager. <input checked="" type="checkbox"/> Frequently wash hands with soap and water for 20 seconds and use hand-sanitizer. <input checked="" type="checkbox"/> Wash hands after sneezing, coughing, blowing your nose, or being in a public place.

Task Hazard Assessment:

A task hazard assessment (THA) form (located in [S3AM-209-PR1](#)) shall be prepared for each task to be performed as part of the scope of work. This includes driving to the site, parking, and walking as well as the hazards, associated risk and appropriate controls for all other work activities. The [DCS Americas Templated THA Library](#) may also be used to find previously approved THAs. The preparer shall have one THA form for each task in the Scope of Work found in this safe work plan and shall also include blank copies in Attachment B. **The [Coronavirus Precautions THA](#) must be included.** The THA forms are to be reviewed just prior to starting the task to evaluate whether conditions are different than originally planned for or additional job steps are required. The THA asks workers to update or 'dirty up' the THA in the 'On-Site Edits' rows to assess the risks presented by the changed condition and requires the worker to describe steps to reduce the risk. If the hazard(s) cannot be successfully mitigated, the work is not allowed to proceed.

In the field, having a daily tailgate meeting is mandatory for all AECOM employees. The Tailgate Meeting must be documented, using the [New Daily Tailgate Meeting App](#) or a Daily Tailgate Meeting form (a blank copy of which is included in **Attachment B**).

Journey Management Plan:

Driving portion of this trip is less than 250 miles and is not to a remote or hazardous area.

Safety, Health, and Environment Policies and Procedures:

Attachment C to this SV-SWP summarizes important AECOM policies and procedures that apply to all Design and Consulting Services (DCS) Americas jobs. For a complete list of Policies and Procedures, the preparers shall review the **AECOM SHE Procedures Checklist ([S3AM-209-FM3](#)) and download and attach to this SWP all applicable procedures, checklists, forms, and attachments from [this link](#).**

Attachments

- Attachment A: Hospital/Clinic Maps, Incident and Observation Reporting and Emergency Response
- Attachment B: Project Task Hazard Assessments and Daily Tailgate Meeting Records
- Attachment C: AECOM SHE Procedures
- Attachment D: Disclaimer

Attachment **A**

Hospital/Clinic Maps, Incident and Observation Reporting and Emergency Response

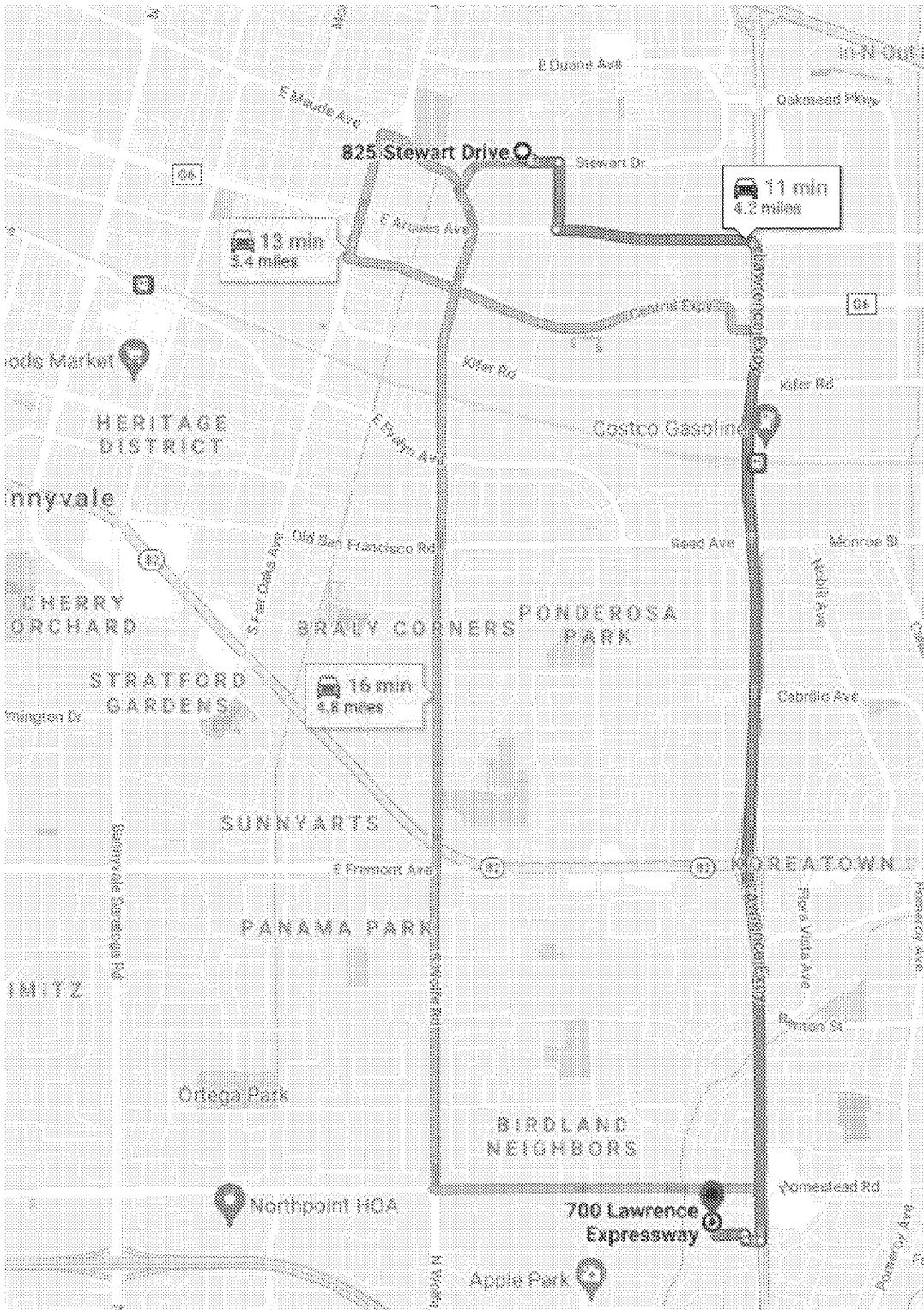
Attachment A: Hospital/Clinic Maps, Incident and Observation Reporting and Emergency Response

Using the instructions in this attachment, identify the nearest Hospital and Clinic to the site.

Nearest Hospital

Kaiser Foundation Hospital.....408-851-5300

Address:	700 Lawrence Expressway		
City:	Santa Clara		
State/Province:	CA	Postal/Zip Code:	95051
Estimated Travel Time:	11 Min	Distance:	4.2 Miles
DRIVING DIRECTION			
<ul style="list-style-type: none"> ■ From Site, Turn LEFT onto Stewart Drive and Head East ■ Turn RIGHT on De Guine Drive ■ Turn LEFT on East Arques Ave ■ Turn Right on Lawrence Expressway ■ Arrive at Hospital on the RIGHT 			
MAP TO HOSPITAL			



Nearest Occupational Clinic

Concentra Medical Center.....408-228-8400

Address:	2737 Walsh Avenue		
City:	Santa Clara		
State/Province:	CA	Postal/Zip Code:	95051
Estimated Travel Time:	6 minutes	Distance:	2.6 miles

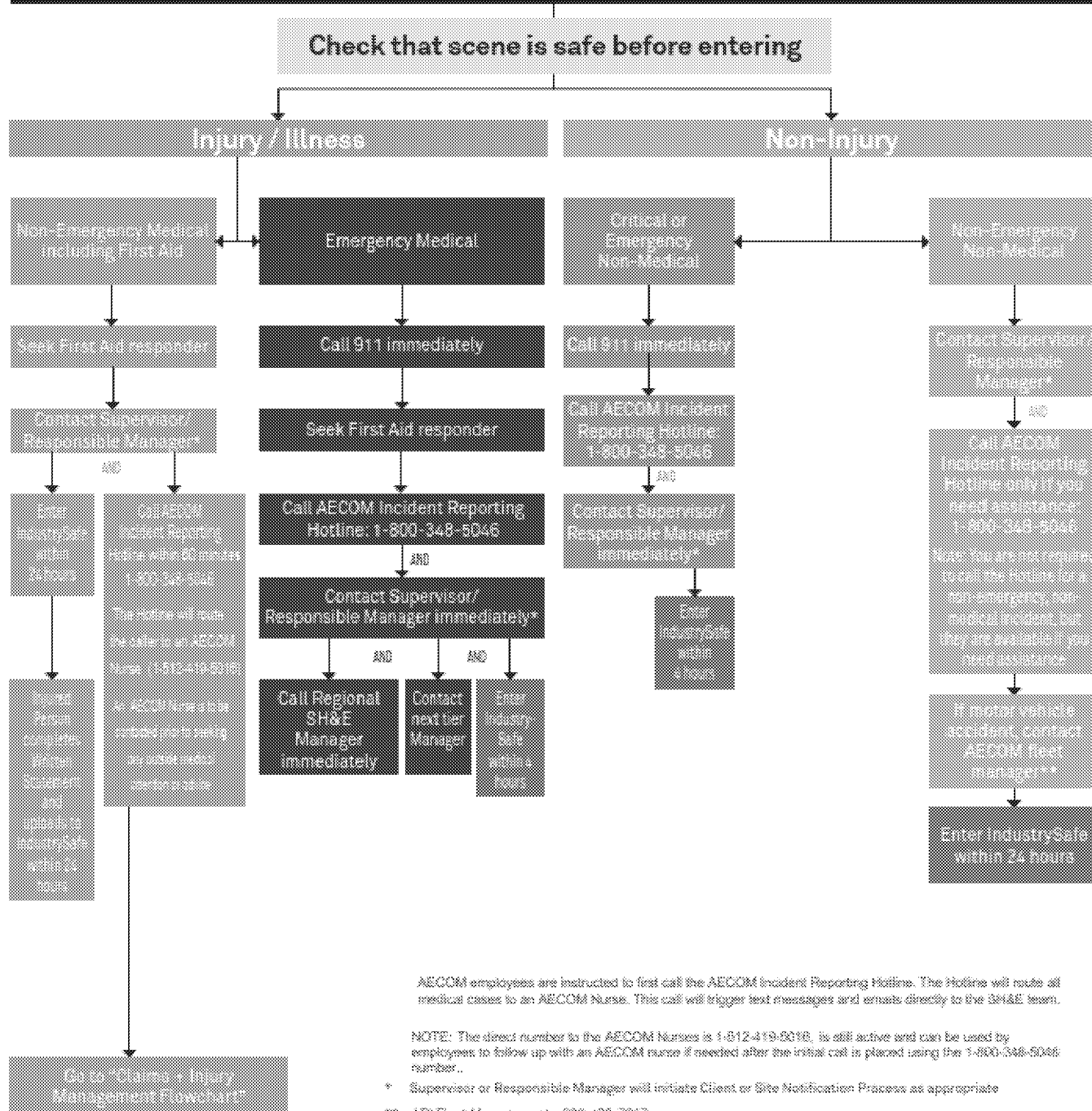
DRIVING DIRECTION

- From Site, Turn LEFT onto Stewart Drive and Head East
- Turn RIGHT onto De Guigne Drive
- Turn LEFT onto East Arques Avenue
- Turn RIGHT onto Lawrence Expressway
- Turn RIGHT onto Central Expressway
- Turn LEFT onto Walsh Avenue
- Arrive at Clinic on the LEFT

MAP TO OCCUPATIONAL CLINIC



Work-Related Incident Occurs:

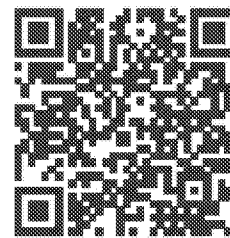


Updated February 2020

Incident Reporting

Any incident for which assistance by SHE is required, including any injury – **even if no first aid is required – must be reported.** Incident reporting procedures are described below. Incidents include any injury, fires, environmental releases, vehicle incidents, incidents where the public is involved, and security-related incidents.

1. If the incident is a significant or life-threatening emergency, the employee or supervisor shall immediately dial 911 or the appropriate emergency contact phone number for your site.
2. The employee or supervisor shall contact the Incident Hotline (800-348-5046) for assistance with all non-life-threatening injuries or illnesses. If the employee has sustained a minor injury/illness, they should also speak to an AECOM Nurse for guidance on treatment of the injury/illness.
3. Within 1 hour, the employee or supervisor must verbally notify their operational leader or Area SH&E Manager.
4. The supervisor, or delegate, must make initial notification in IndustrySafe within 4 hours for significant incidents, or 24 hours for less significant events event.
5. Client and account management notifications may also apply. The Project Manager will make any necessary notification as listed in the Incident Flowchart below.



Scan QR Code to access
IndustrySafe, Incident and
Observation Reporting

Safety Observations

Safety Observations are observations made by employees or subcontractors of condition or behavior that could contribute to an incident, prior to the incident occurring. Observations can identify at-risk behaviors or conditions as well as positive behaviors or conditions that contribute to preventing an incident.

Safety observations can be submitted to IndustrySafe using the link provided above, as well Lifeguard, a proprietary, web-based safety observation and response tracking solution. It is designed to be accessed primarily via smart phone.



Scan QR Code to access
LifeGuard Observation
Report

Medical Emergencies

In the event of a life-threatening or critical emergency, AECOM employees should dial 911 and follow the recommended instructions. However, in less serious situations, an injured employee or a co-worker should contact the Incident Hotline at **800-348-5046** to ensure that the employee receives the best care at the best time (i.e., within the first hour following an injury or potential injury). By contacting the Incident Hotline, the worker may be connected with AECOM's nurses, for first aid advice. If recommended by our nurses, the supervisor or a coworkers should drive the injured employee to the project-designated clinic or hospital. A map to the designated hospital and clinic is included as **Attachment B**, and the locations and addresses are included on page 1 of the SV-SWP.

Lightning/Weather-Related Emergencies

Be Aware: Check the weather forecast before participating in outdoor activities. If the forecast calls for thunderstorms, postpone your trip or activity, or make sure adequate safe shelter is readily available. Many applications available for iPhone or Android phones have lightning alert capabilities or display lightning strikes on radar maps; download one for your smart phone and enable location services to receive alerts.

Go Indoors: Remember the phrase, "**When thunder roars, go indoors.**" If you see lightning and cannot count to 30 before hearing thunder, the lightning is too close for comfort. Find a safe, enclosed shelter when you hear thunder. Safe shelters include homes, offices, shopping centers, and hard-top vehicles with the windows rolled up.

Crouch Close to the Ground and Separate: If you are caught in an open area, crouch down in a ball-like position (feet and knees together) with your head tucked and hands over your ears so that you are down low with minimal contact with the ground. **Do NOT lie down.** Lightning causes electric currents along the top of the ground that can be deadly over 100 feet away. Crouching down is the best combination of being low and touching the ground as little as possible.

Separate: If you are in a group during a thunderstorm, separate from each other. This separation will reduce the number of injuries if lightning strikes the ground.

If a person is struck by lightning:

- Call 911 or other Emergency Services Contact.
- Assess the scene to ensure that, if lightning strikes, continuing risk to rescuers does not exist. For other electrical-related emergencies (non-lightning), ensure the source of electricity has been deenergized.
- Proceed with cardiopulmonary resuscitation (CPR) if victim is not breathing.

Other Applicable Weather-related Items: NA

Vehicle Incidents

All vehicles besides personally owned vehicles or fleet vehicles should be rented through TripActions (accessible via Ecosystem) to ensure that AECOM insurance is included in the rental rate. All other insurances at the rental counter should be declined when renting a vehicle via TripActions.

In the event of a vehicle incident (including collisions as well as mechanical difficulties such as breakdowns and flat tires), the following response is recommended. For breakdowns and flat tires, contact an emergency provider. For rental vehicles, contact the rental company. To the extent possible, AECOM personnel should not change flat tires or perform similar repairs.

If a collision has occurred, assess the situation and move all occupants (except the injured) out of further harm's way. If safe to do so, remove the car from the traveled way. Call 911 if necessary, and report the incident to the Incident Hotline at 800-348-5046 as soon as practical. If appropriate, wait for police to arrive. Provide insurance information to other drivers if necessary or requested and collect the same (AECOM's rental vehicle insurance policy for Enterprise or Avis can be found on the DCS Americas United States or Canada travel pages. If possible, obtain names and phone numbers of witnesses. Take photographs of the scene if possible. **DO NOT ADMIT LIABILITY, AGREE TO PAY FOR DAMAGE, OR SIGN A DOCUMENT RELATED TO AN INCIDENT EXCEPT AS REQUIRED BY LAW.**

Fitness for Duty and Illness Reporting During Pandemic

AECOM employees should always live our life-preserving principle of "Fitness for Duty", which requires employees to stay home from work when they are sick, as they are not "Fit for Duty" when ill. During times of pandemic, the importance of this step is increased. If you experience signs/symptoms of illness or find out that you have come into close contact with a person who has been confirmed positive with the Coronavirus, AECOM requests that you notify the site supervisor and your Area, Regional, or Business Line SH&E Manager, and go home and/or stay home. Managers will work with the local SH&E and/or Resiliency teams to respond according to the AECOM Pandemic Procedure: SR1-003-PR2.

Attachment **B**

Project Task Hazard Assessments and Daily Tailgate Meeting Records

Attachment B: Project Task Hazard Assessments and Daily Tailgate Meeting Records

Task Hazard Assessment Instructions:

Each unique task or work group should have their own THAs. If workers have a THA for their task(s) in hand, they should simply review it and document the site-specific edits in the appropriate section. If workers do ***not*** have a THA for all tasks to be performed, a THA must be obtained or drafted *prior to starting work* on that task. Use additional pages as needed.

- Identify the basic steps of the task that must be performed in order and their associated hazards. Identify controls or barriers to mitigate each identified hazard.
- Clearly identify any **STOP WORK** triggers.
- Document stop work and change management if conditions/ scope changes.
- Use 4-Sight to identify and mitigate site-specific hazards throughout the day. Modify the THA as needed. Contact site supervisors or the PM for any significant scope changes or changes of expected conditions.
- All THAs shall be 3 pages (maximum) or less (preferred). If they are longer, the task is too broad.
- All hazards will use standardized nomenclature (Hazard Wheel), should be specific, detail how someone could be hurt and what the outcome could be.
- All actions to mitigate hazards must be specific, clearly aligned with its respective hazard and not generic. Avoid words such as “*proper*”, “*correct*”, or “*appropriate*”. Use specifics and numerical values (i.e. wear disposable nitrile gloves, stand back 6 feet/1.8 meters, take a 10-minute break every hour).
- PPE cannot be the only line of defense - PPE is always the last line of defense, so think through what other controls (engineering, administrative, etc.) could mitigate hazards.

Task Hazard Assessment

Task Name:	Driving to and From Site	Control #:	01-01-12-02
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Project Name:	TRW Microwave	Client:	Northrop Grumman	Date:	8/16/21
Permits Required? (list):	NA	Work Location:	Sunnyvale, CA		

This THA must be fully reviewed with all staff members. All job steps, hazards, work practices, and PPE are clearly understood and have been implemented. All necessary revisions have been written on the THA.

Required PPE:	<input type="checkbox"/> Hard Hat <input type="checkbox"/> Safety Glasses <input type="checkbox"/> HiVis Vest <input type="checkbox"/> Safety Toe Boots <input type="checkbox"/> Gloves: _____ Leather / Nitrile					<input type="checkbox"/> Hearing Protection <input type="checkbox"/> Other: _____
Tools & Equipment:	Emergency kit Communication device (cell phone) Navigation system					

REMINDER: Use 4-Sight at the start of, and continuously throughout the job/task to identify additional and/or hazards to act on!					
Job Steps <i>List all steps required to perform a task in the sequence they are performed</i>	Potential Hazards <i>How could you be hurt? What would the injury be?</i>	Risk (initial)	Critical Actions To Mitigate Hazards <i>List control measures required to eliminate, control or protect against the potential hazards associated with each job step to minimize the risk of injury or environmental impact. Identify any 'Stop Work' triggers.</i>	Risk (final)	
1. Trip Planning	1a. Unauthorized driving	9	1a. You must be an AECOM authorized driver to drive for AECOM business purposes. Consult the requirements of S3AM-005-PR1. Authorized Drivers shall maintain a current driver's license with full privileges applicable to the vehicle to be operated. Develop a Journey Management Plan if applicable.	4	
	1b. Inclement weather	6	1b. Evaluate weather conditions prior to beginning the travel to determine if travel should proceed. Verify your vehicle is equipped to travel in poor weather. Have supplies on hand in the event that you become stranded, including a communication device to call for help.	4	
	1c. Getting Lost	6	1c. Review route in advance and program GPS prior to leaving	3	
	1d. Inadequate vehicle for the site/trip	7	1d. Understand what type of vehicle is necessary to transport tools & equipment to the site. Know site conditions before departure and obtain proper vehicle, 4-Wheel drive if necessary	4	
	1e. Vehicle malfunction	8	1e. Inspect vehicle prior to leaving. Verify that maintenance records are current.	4	
On-Site Edits:					
2. Driving	2a. Fatigue	15	2a. Start trip well rested & take breaks when needed. Share driving responsibilities where possible. STOP DRIVING AND PULL OVER in a safe place if you begin nodding off or showing other signs of fatigue.	4	

Americas

Daily Tailgate Meeting

S3AM-209-FM5

Instructions: Conduct meeting prior to sending crews to individual tasks. Require attendance of all AECOM employees and subcontractors. Invite personnel from simultaneous operations for coordination purposes. Review scope of work and briefly discuss required and applicable topics. **This meeting is a daily refresher, not a full orientation.** Task-specific discussions associated with Task Hazard Assessment (THA) follow this meeting at the task location immediately before individual task is started.

AECOM Supervisor Name:

Phone Number:

AECOM SH&E Rep. Name:

Phone Number:

Meeting Leader:

DCS Americas - This form may be replaced by the electronic Daily Tailgate Meeting Tool. Link - [Ecosystem Daily Tailgate Meeting App Site](#)

Date:	Project Name/Location:	Project Number:
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Today's Scope of Work:

Muster Point Location:	First Aid Kit Location:	Fire Extinguisher Location:	Spill Kit Location:
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1. Required Topics <ul style="list-style-type: none"> <input type="checkbox"/> Fitness for Duty requirements, all sign in / sign out <input type="checkbox"/> Required training (incl. task specific) completed and current <input type="checkbox"/> SH&E Plan onsite - understood, reviewed, signed by all (incl. scope, preplanning hazard assessments / risk registers, controls, procedures, requirements, etc.) <input type="checkbox"/> Task Hazard Assessments (THAs) are to be reviewed and completed for each task immediately prior to conducting <input type="checkbox"/> STOP WORK Right & Responsibility- all task changes/changed conditions re-assess with THA <input type="checkbox"/> Requirement to report to supervisor any injury, illness, damage, near miss, unsafe act / condition <input type="checkbox"/> Emergency Response Plan – including muster point, first aid kit, fire extinguisher, clinic/hospital location <input type="checkbox"/> Personal Protective Equipment (PPE) - Required items per hazard assessments in good condition / in use by all <input type="checkbox"/> Equipment/machinery inspected (documented as required) and in good condition - operators properly trained/certified <input type="checkbox"/> Work area set up and demarcation/ barricades in place to protect workers, site staff, and the public <input type="checkbox"/> Required checklists/records available, understood (describe): <input type="checkbox"/> Lessons Learned / SH&E improvements (describe): 	2. Discuss if Applicable to Today's Work <ul style="list-style-type: none"> <input type="checkbox"/> <input type="checkbox"/> Check <input checked="" type="checkbox"/> as reviewed or mark <input type="checkbox"/> as not applicable <input type="checkbox"/> <input type="checkbox"/> Biological/ Chemical / Electrical Hazards <input type="checkbox"/> <input type="checkbox"/> Ergonomics - Lifting, Body Position <input type="checkbox"/> <input type="checkbox"/> Lock Out/ Tag Out <input type="checkbox"/> <input type="checkbox"/> Short Service Employees - visual identifier and mentor/ oversight assignment <input type="checkbox"/> <input type="checkbox"/> Simultaneous/ Neighbouring Operations <input type="checkbox"/> <input type="checkbox"/> Slip/ Trip/ Fall Hazards <input type="checkbox"/> <input type="checkbox"/> Specialized PPE Needs <input type="checkbox"/> <input type="checkbox"/> Traffic Control <input type="checkbox"/> <input type="checkbox"/> Waste Management/ Decontamination <input type="checkbox"/> <input type="checkbox"/> Weather Hazards / Heat Stress / Cold Stress <input type="checkbox"/> <input type="checkbox"/> Subcontractor Requirements (e.g., JHAs, THAs, procedures, reporting, etc.) <input type="checkbox"/> <input type="checkbox"/> Work Permits / Plans required (e.g., Fall Protection, Confined Space, Hot Work, Critical Lifts, etc.); in place, understood (identify/attach): <input type="checkbox"/> <input type="checkbox"/> Other Topics (describe/attach): <input type="checkbox"/> <input type="checkbox"/> Client specific requirements (describe):
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3. Daily Check Out by Site Supervisor	
Describe incidents, near misses, observations or Stop Work interventions from today:	Describe Lessons Learned/ Improvement Areas from today:

The site is being left in a safe condition and work crew checked out as fit unless otherwise specified as above.

Site Supervisor Name	Signature	Date Time (at end of day / shift)
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Worker Acknowledgement / Sign In Sign Out sheets applicable to this meeting are on reverse and, if applicable, attached.

Daily Tailgate Meeting (S3AM-209-FM5)

Revision 10 June 1, 2021

PRINTED COPIES ARE UNCONTROLLED. CONTROLLED COPY IS AVAILABLE ON COMPANY INTRANET.

1 of 2

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All employees:

- **STOP WORK** if concerned / uncertain about safety / hazard or additional precaution is not recorded on the THA.
- **Be alert and communicate any changes in personnel or conditions at the worksite to the supervisor.**
- **Reassess task, hazards, & mitigations on an ongoing basis; amend the THA if needed.**

SITE WORKERS (including AECOM Contractors and Subcontractors): Your signature below means that you understand:

- * The requirement to participate in creating, reviewing, & updating hazard assessments (THA) applicable to your task(s).
- * The hazards & control measures associated with each task you are about to perform.
- * The permit to work requirements applicable to the work you are about to perform (if it includes permitted activities).
- * That no tasks or work is to be performed without a hazard assessment.
- * Your authority & obligation to "Stop Work" intervene, speak up/ listen up.

Your initials (right columns) certify that you arrived & departed fit for duty, & have reported all incidents/near misses; meaning:

- * You are physically and mentally fit for duty and have inspected your required PPE to ensure satisfactory condition.
- * You are not under the influence of any type of medication, drugs, or alcohol that could affect your ability to work safely.
- * You are aware of your responsibility to immediately report any illness, injury (regardless of where or when it occurred), or impairment/fatigue issue to the AECOM Supervisor.
- * You signed out as fit / uninjured unless you have otherwise informed the AECOM Supervisor.

Print Name & Company	Signature	Initials & Sign In Time	Initials & Sign Out Time
		In & Fit	Out & Fit
		In & Fit	Out & Fit
		In & Fit	Out & Fit
		In & Fit	Out & Fit
		In & Fit	Out & Fit
		In & Fit	Out & Fit
		In & Fit	Out & Fit
		In & Fit	Out & Fit
		In & Fit	Out & Fit
		In & Fit	Out & Fit

(Attach additional Site Worker sign-in/out sheets if needed) Identify number of attached sheets: _____

SITE VISITOR / SITE REPRESENTATIVE

Name	Company Name	Arrival Time	Departure Time	Signature

Task Hazard Analysis

Task Name: Driving to and From Site	Control #:
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REMINDER: Use 4-Sight at the start of, and continuously throughout the job/task to identify additional and/or hazards to act on!				
Job Steps <small>List all steps required to perform a task in the sequence they are performed</small>	Potential Hazards <small>How could you be hurt? What would the injury be?</small>	Risk <small>(initial)</small>	Critical Actions To Mitigate Hazards <small>List control measures required to eliminate, control or protect against the potential hazards associated with each job step to minimize the risk of injury or environmental impact. Identify any 'Stop Work' triggers.</small>	Risk <small>(final)</small>
	2b. Risky driving practices	15	2b. Practice defensive driving techniques and avoid bad driving habits <ul style="list-style-type: none"> Allow for adequate time to make the trip Do not speed or attempt to multi-task Do not use cell phone or text or attempt to program GPS while driving 	4
On-Site Edits:				
3. Stops/breaks during transit	3a. Theft of equipment/materials	6	3a. Place any likely theft items out of sight and lock vehicle when leaving it. Do not leave vehicle unattended for longer than necessary. If at all possible, avoid leaving packed vehicles in public parking areas overnight, unload if possible. Park in well lighted areas.	4
	3b. Personal security risk	10	3b. Be alert and aware of surroundings when making stops. Stop at areas which are well lit and have security if possible.	3
On-Site Edits:				
4.	4a.		4a.	
On-Site Edits:				

Additional Notes:

Task Hazard Assessment

All Employees:

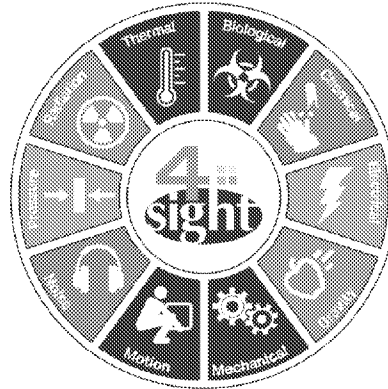
STOP WORK if uncertain about safety or if a hazard or additional precaution is not recorded on the THA.

Be alert, recognize and communicate any changes in scope, personnel or conditions at the worksite to the supervisor.

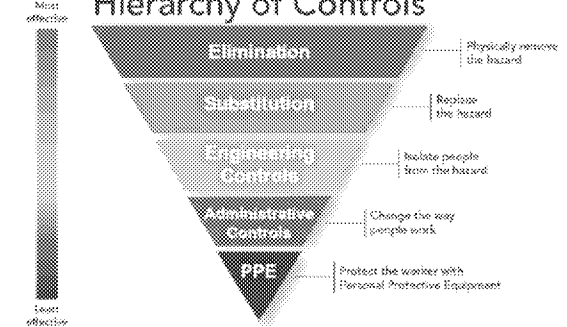
Use 4-Sight, AECOM's last minute risk assessment process continuously throughout the day by asking yourself and your co-workers to assess your task, hazards, and mitigations. Amend the THA when needed.

- **What am I about to do?**
- **What can go wrong?**
- **What can be done to make it safer?**
- **What have I done to communicate the hazards?**

For a more thorough identification of hazards, ask "What else could go wrong?" using the Hazard Categories



Hierarchy of Controls



- **Most hazards need more than one control**
- **What should you do? Stack your controls**
- **PPE can NEVER be your only means of protection**

Worker Sign On	
<i>I participated in the on-site review and fully understand the content of this Task Hazard Assessment.</i>	
Printed Name	Signature
1. Supervisor:	
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Visitor Acknowledgement
<i>Visitors review task hazards and acknowledge understanding</i>
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Submit a new THA for addition to the DCSA THA Library or send THA improvement suggestions to DCSA.THA.Library@AECOM.com
Include a copy of the new THA or a photo of the THA modifications as appropriate.

Task Hazard Assessment

Task Name: Accessing Rooftop Work Areas	Control #: Rooftop-1
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Project Name:	TRW Microwave	Client:	Northrop Grumman	Date:	8/16/21
Permits Required? (list):	NA	Work Location:	Sunnyvale, CA		

This THA must be fully reviewed with all staff members. All job steps, hazards, work practices, and PPE must be clearly understood and have been implemented. Ensure that all necessary revisions have been written on the THA and all team members sign the THA.

Required PPE:	<input checked="" type="checkbox"/> Hard Hat <input checked="" type="checkbox"/> Safety Glasses <input checked="" type="checkbox"/> HiVis Vest <input checked="" type="checkbox"/> Safety Toe Boots <input type="checkbox"/> Gloves: See below <input type="checkbox"/> Harness & lanyard <input type="checkbox"/> _____
Required Training	All roof-access work requires "Fall Protection" AECOM U training.

Research the Work Area: Determine the following information prior to accessing the rooftop work area. Consult with client/owner. Must be reviewed by SH&E Manager during review of safe work plan. Use information obtained to complete the flow chart on the following page.

✓	Question/Condition	Response
	Does the owner require a work permit to access the roof?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, describe:
	Does the owner require special conditions to work on the roof? (i.e. escort by facility personnel, security clearance, etc.)	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, describe:
	Does the owner require training prior to accessing the roof?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, describe:
	Is the roof flat or sloped?	<input checked="" type="checkbox"/> Flat <input type="checkbox"/> Sloped Angle of the slope ____Degrees Or, pitch of roof ____
	Does the roof have a parapet or engineered edge protection > 39-inches tall?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, how tall is the parapet? ____at least 39____ inches
	Does the roof have an engineered fall prevention system? (i.e. engineered anchorages, fall restraint system, guardrails, etc.)	<input type="checkbox"/> No <input type="checkbox"/> Yes If yes, describe: There are tall wind-blocking structures surrounding the roof
	Does the roof have skylights, atriums or other roof openings?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, are they protected from falls through? <input type="checkbox"/> No <input type="checkbox"/> Yes
	How is the roof accessed? (Check all that apply)	<input type="checkbox"/> Exterior fixed ladder <input checked="" type="checkbox"/> Interior fixed ladder <input type="checkbox"/> Interior/exterior stairs <input type="checkbox"/> Elevator <input checked="" type="checkbox"/> Roof hatch <input type="checkbox"/> Door <input type="checkbox"/> Other:
	How close is the rooftop hatch/door to the roof edge?	Measurement: _____ feet, unknown, but not known to be near the edge
	If access is through a rooftop hatch does it have a parapet?	<input type="checkbox"/> No <input type="checkbox"/> Yes NA
	Is there a local service to assist with emergency rescue from the rooftop if needed?	<input type="checkbox"/> No <input type="checkbox"/> Yes If yes, describe: Unknown
	Is the client aware of other potential hazards on the roof? (i.e. snow/ice, standing water, soft spots, birds/bats or other biohazards, mechanical/electrical hazards, radio antennas)	Describe: No
Number of persons accessing roof (2 minimum):5		Weather forecast for day of roof work: Temperature Range:____up to 80 degrees____ Conditions: <input checked="" type="checkbox"/> Sunny <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Snow/Ice <input type="checkbox"/> Windy gust speeds:

Task Hazard Analysis

Task Name: Accessing Rooftop Work Areas

Control #: Rooftop-1

REMINDER: Use 4-Sight at the start of, and continuously throughout the job/task to identify additional and/or hazards to act on!

Job Steps <i>List all steps required to perform a task in the sequence they are performed</i>		Potential Hazards <i>How could you be hurt? What would the injury be?</i>	Risk <i>(initial)</i>	Critical Actions To Mitigate Hazards <i>List control measures required to eliminate, control or protect against the potential hazards associated with each job step to minimize the risk of injury or environmental impact. Identify any 'Stop Work' triggers.</i>	Risk <i>(final)</i>
1. Inspect - Verify work area conditions (including ground-level if using a ladder) and control/demarcation barriers in place and maintained (if present). Determine slope of roof and condition of rooftop walking surfaces.	1a.	Electric shock, arc flash or electrocution from nearby and overhead electrical equipment	15	1a. Stay outside the minimum radial clearance for overhead power lines (minimum 10 feet); Stay outside the safe working distance based on the system's voltage to avoid an arc flash exposure; Wear the site minimum PPE listed above.	5
	1b.	Slips, trips and falls to same level on uneven, sloped or slick surfaces	9	1b. Plan your route of travel to minimize travel on uneven, sloped or slick surfaces; Use 3-point of contact when handrails are available; Do not walk while writing, photographing or talking on the phone; Wear safety toe boots with oil, chemical and slip resistant soles with adequate tread.	6
	1c.	Contact with sharp and/or jagged edges on ladders, barricades and equipment	6	1c. Plan your route of travel to allow for adequate clearance around objects in order to avoid incidental contact; Place hands/fingers only on surfaces that are visible; Wear standard work gloves with appropriate cut level protection (e.g. leather, mechanics or similar) while touching or handling ladders, barricades and equipment.	4
	1d.				5
On-Site Edits:					
2. Access roof and rooftop equipment - Confirm equipment, scaffold/ladder, and aerial lift inspections have been completed	3a.	Falls from ladders, stairs	15	3a. Use 3-points of contact to climb ladders or stairways. Do not carry materials or equipment in your hands – use a backpack or satchel. Fixed industrial ladders greater than 20 feet in height require special fall protection equipment beyond cages – consult with your SH&E manager before using cable climbing equipment. If using roof hatch to access rooftop, ensure ladder has an extension or other grab bar to provide handhold at least 3 feet above the roof surface. Immediately move away from edges or parapets.	5
	3b.	Falls from roof edges or changes in elevation (roof levels)	15	3b. Employees relying on fall protection barriers must have completed Fall Protection prior to accessing elevated work areas. If using elements of personal fall arrest or fall restraint devices, employees must have completed Fall Protection and Authorized User training prior to accessing elevated work areas. Remain behind edge protection barriers or guardrails. Do not lean or step onto barriers or guardrails.	6
	3c.	Falls through skylights or other roof openings	15	3c. Identify and avoid unprotected skylights and roof openings. If work area requires close access to unprotected skylights or roof openings, create visual barriers (caution tape/cones or post a monitor at the hazard area to protect from accidental approach.	5

Task Hazard Analysis

Task Name: Accessing Rooftop Work Areas

Control #: Rooftop-1

REMINDER: Use 4-Sight at the start of, and continuously throughout the job/task to identify additional and/or hazards to act on!

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Access roof and rooftop equipment - continued		3d. Struck by or caught in pinch points from rooftop hatches or doors.	12	3d. Maintain awareness of hand/finger positioning to avoid pinch points. Evaluate mechanical prop, springs and closing mechanisms for damage or corrosion. Use adequately designed mechanical props to hold doors or hatches open.	5
On-Site Edits:	Identify additional rooftop hazards and controls here				
3.	Observe/Inspect mechanical installations – fans, hoods, exhaust/intake vents, piping, air handler units, tanks, mezzanines and other mechanical systems installed on rooftop	4a. Contact with stored energy (mechanical, hydraulic, electrical, pneumatic)	15	4a. Coordinate access to mechanical installations with client facility manager. Use proper lock-out/tag-out procedures. Lock-out/Tag-out procedures must be performed by a qualified and authorized person familiar with the equipment.	5
		4b. Struck by or caught in mechanical systems	15	4b. Maintain safe distance from fans, motors, pulleys and other mechanical systems that may start-up automatically. Do not put arms, hands, fingers or other extremities inside mechanical cabinets or enclosures.	4
		4c. Hearing damage from loud noises	5	4c. Use hearing protection and sound shielding to prevent high noise exposures.	3
On-Site Edits:					

Task Hazard Analysis

Task Name: Accessing Rooftop Work Areas	Control #: Rooftop-1
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REMINDER: Use 4-Sight at the start of, and continuously throughout the job/task to identify additional and/or hazards to act on!				
Job Steps <i>List all steps required to perform a task in the sequence they are performed</i>	Potential Hazards <i>How could you be hurt? What would the injury be?</i>	Risk <i>(initial)</i>	Critical Actions To Mitigate Hazards <i>List control measures required to eliminate, control or protect against the potential hazards associated with each job step to minimize the risk of injury or environmental impact. Identify any 'Stop Work' triggers.</i>	Risk <i>(final)</i>
Detail other activities to be performed on rooftop:				

Additional Notes:

Items requiring inspection by a competent person include, but are not limited to:

- Engineering controls: anchor points, floor/hole covers; lifelines (horizontal and vertical), guard rails; etc.
- Ladders
- Personal protective equipment – Fall Protection (Fall arrest and/or fall restraint)
- Rescue equipment: anti-suspension straps, self-rescue devices, etc.

Task Hazard Assessment

All Employees:

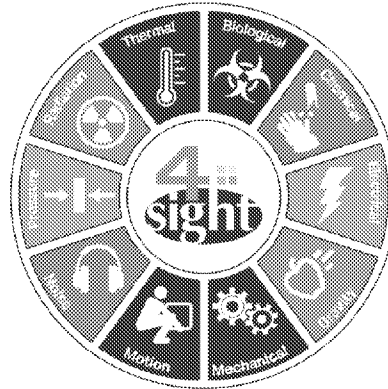
STOP WORK if uncertain about safety or if a hazard or additional precaution is not recorded on the THA.

Be alert, recognize and communicate any changes in scope, personnel or conditions at the worksite to the supervisor.

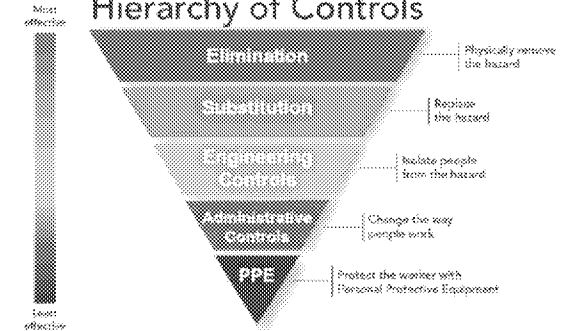
Use 4-Sight, AECOM's last minute risk assessment process continuously throughout the day by asking yourself and your co-workers to assess your task, hazards, and mitigations. Amend the THA when needed.

- **What am I about to do?**
- **What can go wrong?**
- **What can be done to make it safer?**
- **What have I done to communicate the hazards?**

For a more thorough identification of hazards, ask "What else could go wrong?" using the Hazard Categories



Hierarchy of Controls



- **Most hazards need more than one control**
- **What should you do? Stack your controls**
- **PPE can NEVER be your only means of protection**

Worker Sign On	
<i>I participated in the on-site review and fully understand the content of this Task Hazard Assessment.</i>	
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<i>Visitors review task hazards and acknowledge understanding</i>
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Submit a new THA for addition to the DCSA THA Library or send THA improvement suggestions to DCSA.THA.Library@AECOM.com
Include a copy of the new THA or a photo of the THA modifications as appropriate.

Task Hazard Assessment

Task Name:	Site Walk – General Site Visit	Control #:	01-01-10-06
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Project Name:	TRW Microwave	Client:	Northrop Grumman	Date:	8/16/21
Permits Required? (list):	NA	Work Location:	Sunnyvale/CA		

This THA must be fully reviewed with all staff members. All job steps, hazards, work practices, and PPE are clearly understood and have been implemented. All necessary revisions have been written on the THA.

Required PPE:	<input checked="" type="checkbox"/> Hard Hat <input checked="" type="checkbox"/> Safety Glasses <input checked="" type="checkbox"/> HiVis Vest <input checked="" type="checkbox"/> Safety Toe Boots <input type="checkbox"/> Gloves: leather <input type="checkbox"/> Hearing Protection <input type="checkbox"/> Other: PPE for expected weather conditions				
Tools & Equipment:	camera	notebook/pen			

REMINDER: Use 4-Sight at the start of, and continuously throughout the job/task to identify additional and/or hazards to act on!					
Job Steps <i>List all steps required to perform a task in the sequence they are performed</i>		Potential Hazards <i>How could you be hurt? What would the injury be?</i>	Risk <i>(initial)</i>	Critical Actions To Mitigate Hazards <i>List control measures required to eliminate, control or protect against the potential hazards associated with each job step to minimize the risk of injury or environmental impact. Identify any 'Stop Work' triggers.</i>	Risk <i>(final)</i>
1. Plan the site walk	1a. Personal injury from not having proper PPE		4	1a. Determine what the basic PPE requirements are in advance and have available or know that they will be available to you to borrow once on site.	4
	1b. Vehicle getting stuck or damaged due to terrain/site conditions		4	1b. Determine what type of vehicle is needed for site conditions (4-wheel drive, truck or car).	4
	1c. Heat/cold stress, insect bites, sunburn from inadequate materials/supplies		4	1c. Determine what materials and supplies you must bring versus what is available on site such as insect spray, sunscreen, drinking water, food, etc.	4
	1d. Lack of site escort if needed		4	1d. Prearrange trip in advance where possible, determine who will be meeting you on site and when.	4
	1e. Inclement weather		6	1e. Plan for the anticipated weather conditions. Check the predicted weather for the worksite prior to departing. Reschedule site visit if severe weather such as lightning storms, sleet/ice storms, blizzards, etc., are predicted.	2
On-Site Edits:					
2. Arriving at site	2a. Sustaining slip/trip/fall injuries from parking in inappropriate areas		6	2a. Park in an area with firm, level surface, and with a good surface (avoiding wet/muddy conditions, poor walking surfaces, etc) available when you exit the vehicle.	2

Task Hazard Assessment

Task Name: Site Visit	Control #:
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REMINDER: Use 4-Sight at the start of, and continuously throughout the job/task to identify additional and/or hazards to act on!				
Job Steps <i>List all steps required to perform a task in the sequence they are performed</i>	Potential Hazards <i>How could you be hurt? What would the injury be?</i>	Risk <i>(initial)</i>	Critical Actions To Mitigate Hazards <i>List control measures required to eliminate, control or protect against the potential hazards associated with each job step to minimize the risk of injury or environmental impact. Identify any 'Stop Work' triggers.</i>	Risk <i>(final)</i>
	2b. Injuries from being struck due to 3 rd party or client operations	10	2b. Park that you do not subject yourself or your vehicle to site hazards such as construction vehicle traffic, forklifts or other equipment, passing motorists, etc. ,	2
On-Site Edits:				
3. Walking Site	3a. Biological hazards	4	3a. There are many different types of biological hazards that can be encountered on a work site. These include ticks, spiders, mosquitoes, chiggers, poisonous or other noxious plants, alligators, bears, small mammals, bird droppings, small mammals, snakes, etc. Do not attempt to pick up, handle, or otherwise handle stray or wild animals such as dogs, cats, raccoons, squirrels, etc., no matter how tame they may appear.	2
	3b. Slips/trips/falls	4	3b. Be aware of walking surfaces at all times, wear footwear with good tread and ankle support, use handrails where available, avoid walking in muddy or wet areas when possible, identify and mark or have removed any obstructions that may be present in predicted walking paths.	2
On-Site Edits:				
4. Leaving the site	4a. Hitting object when leaving causing vehicle or property damage	6	4a. Before moving the vehicle, perform a 360° walk around of the vehicle to verify that no changes have been made that may impact exit.	4
On-Site Edits:				
5.	5a.		5a.	

Task Hazard Assessment

Task Name: Site Visit	Control #:
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REMINDER: Use 4-Sight at the start of, and continuously throughout the job/task to identify additional and/or hazards to act on!					
	Job Steps <i>List all steps required to perform a task in the sequence they are performed</i>	Potential Hazards <i>How could you be hurt? What would the injury be?</i>	Risk <i>(initial)</i>	Critical Actions To Mitigate Hazards <i>List control measures required to eliminate, control or protect against the potential hazards associated with each job step to minimize the risk of injury or environmental impact. Identify any 'Stop Work' triggers.</i>	Risk <i>(final)</i>
On-Site Edits:					
	6.	6a.		6a.	
On-Site Edits:					
	7.	7a.		7a.	
On-Site Edits:					

Additional Notes:

Task Hazard Assessment

Task Name: Site Visit

Control #:

All Employees:

STOP WORK if uncertain about safety or if a hazard or additional precaution is not recorded on the THA.

Be alert, recognize and communicate any changes in scope, personnel or conditions at the worksite to the supervisor.

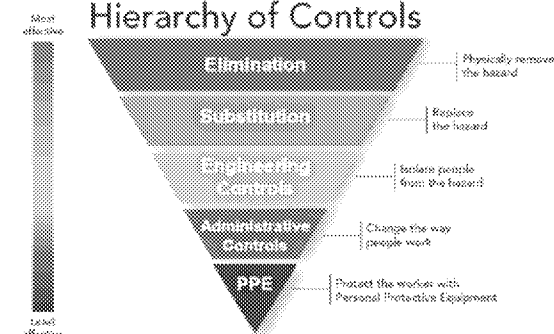
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Hierarchy of Controls



- ▶ **Most hazards need more than one control**
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Worker Sign On

I participated in the on-site review and fully understand the content of this Task Hazard Assessment.

Printed Name	Signature
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Visitors review task hazards and acknowledge understanding

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Task Hazard Assessment

Task Name:	Site Visit	Control #:	
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Include a copy of the new THA or a photo of the THA modifications as appropriate.

Attachment **C**

AECOM SHE Procedures

Attachment C: AECOM SHE Procedures

Hazard/ Activity (Note: Text in this column links to procedure)	Applicable Procedure	Hazard / Activity (Note: Text in this column links to procedure)	Applicable Procedure
<input type="checkbox"/> Abrasive Blasting	S3AM-335-PR	<input type="checkbox"/> Highway and Road Work	S3AM-306-PR
<input type="checkbox"/> Aerial Work Platforms	S3AM-323-PR	<input type="checkbox"/> Hoists Elevators and Conveyors	S3AM-343-PR
<input type="checkbox"/> All-Terrain Vehicles	S3AM-319-PR	<input type="checkbox"/> Hot Work	S3AM-332-PR
<input type="checkbox"/> Blasting and Explosives	S3AM-336-PR	<input checked="" type="checkbox"/> Ladders	S3AM-312-PR
<input type="checkbox"/> Bloodborne Pathogens	S3AM-111-PR	<input type="checkbox"/> Lockout Tagout	S3AM-325-PR
<input type="checkbox"/> Cofferdams	S3AM-344-PR	<input type="checkbox"/> Machine Guarding Safe Work Practice	S3AM-326-PR
<input type="checkbox"/> Cold Stress	S3AM-112-PR	<input type="checkbox"/> Marine Safety and Vessel Operations	S3AM-333-PR
<input type="checkbox"/> Compressed Air Systems and Testing	S3AM-337-PR	<input type="checkbox"/> Material Storage	S3AM-316-PR
<input type="checkbox"/> Compressed Gases	S3AM-114-PR	<input type="checkbox"/> Mine Site Activities	S3AM-341-PR
<input type="checkbox"/> Concrete Work	S3AM-338-PR	<input type="checkbox"/> Mining Operations	S3AM-345-PR
<input type="checkbox"/> Confined Spaces	S3AM-301-PR	<input type="checkbox"/> Non Ionizing Radiation	S3AM-121-PR
<input type="checkbox"/> Corrosive Reactive Materials	S3AM-125-PR	<input type="checkbox"/> Overhead Lines	S3AM-322-PR
<input type="checkbox"/> Cranes and Lifting Devices	S3AM-310-PR	<input type="checkbox"/> Powder-Actuated Tools	S3AM-327-PR
<input type="checkbox"/> Demolition	S3AM-339-PR	<input type="checkbox"/> Powered Industrial Trucks	S3AM-324-PR
<input type="checkbox"/> Diving (scientific and commercial)	S3AM-334-PR	<input type="checkbox"/> Radiation	S3AM-120-PR
<input type="checkbox"/> Drilling, Boring & Direct Push Probing	S3AM-321-PR	<input type="checkbox"/> Railroad Safety	S3AM-329-PR
<input type="checkbox"/> Electrical Safety	S3AM-302-PR	<input type="checkbox"/> Respiratory Protection	S3AM-123-PR
<input type="checkbox"/> Excavation	S3AM-303-PR	<input type="checkbox"/> Scaffolding	S3AM-311-PR
<input type="checkbox"/> Fall Protection	S3AM-304-PR	<input type="checkbox"/> Steel Erection	S3AM-340-PR
<input type="checkbox"/> Flammable and Combustible Liquids	S3AM-126-PR	<input type="checkbox"/> Temp. Floors, Stairs, Railings, Toe-boards	S3AM-342-PR
<input type="checkbox"/> Gauge Source Radiation	S3AM-122-PR	<input type="checkbox"/> Underground Utilities	S3AM-331-PR
<input type="checkbox"/> Hand and Power Tools	S3AM-305-PR	<input type="checkbox"/> Underground Work	S3AM-330-PR
<input type="checkbox"/> Hazardous Waste Operations	S3AM-117-PR	<input type="checkbox"/> Wildlife, Plants and Insects	S3AM-313-PR
<input type="checkbox"/> Heat Stress	S3AM-113-PR	<input type="checkbox"/> Working Alone	S3AM-314-PR
<input type="checkbox"/> Heavy Equipment	S3AM-309-PR	<input type="checkbox"/> Working On and Near Water	S3AM-315-PR
<input type="checkbox"/> High Altitude	S3AM-124-PR		

Stop Work Authority

AECOM empowers and expects all employees to exercise their Stop Work Authority (see Stop Work Authority procedure [S3AM-002-PR](#)) if an incident appears imminent, or when hazardous behaviors or conditions are observed. A stop work request can be informal if the situation can be easily corrected, or may require shutting down operations if revised procedures are necessary to mitigate the hazard. If an AECOM employee observes an imminently hazardous situation on a site controlled by others (i.e., a client-managed contractor), the employee can always stop work for themselves by removing themselves from the situation. Employees also may attempt to stop work to avoid allowing the contractor to come to harm by immediately notifying the contractor foreman or site engineer, or if necessary, the client or party managing the contractor.

No employee should object to the issuance of a stop work request, nor can any disciplinary action be levied against the employee. All employees must agree that the situation has been mitigated before resuming work. No employee will be disciplined for refusing to work if they feel it is unsafe.

Roles and Responsibilities

Roles and responsibilities for the project team are defined in Safety, Health and Environment (SHE) procedure S3AM-209-PR. The Project Manager (PM) is responsible for developing this SWP and establishing a budget to implement the controls and training required. The PM is also responsible for ensuring that the plan is implemented, that appropriate documentation is generated, and that records are maintained. The SHE Representative (SHER) or SHE Manager (SHEM) is responsible for reviewing and approving this SWP, and assisting with other SHE matters upon request. A Site Safety Officer (SSO) may be appointed to oversee implementation of the SWP in the field. All project team members are responsible for reviewing and abiding by this SWP, performing daily (or more frequent) task hazard assessments, stopping work when necessary to correct unsafe behaviors or conditions, and reporting incidents promptly to the PM and AECOM Incident Hotline at 800-348-5046).

Newly Hired or Transferred Employees (Short Service Employee – SSE)

A Short Service Employee (SSE) is an employee with fewer than 6 months' experience working on field projects or an employee who has not completed the required training or received required certifications (see SSE procedure S3AM-002-PR). The PM will identify all SSEs working on the project, and each SSE will be assigned to an experienced team member so all activities may be monitored. SSEs shall be easily identified in the field environment, such as through wearing a specific colored hardhat or a manufacturer-approved orange stripe applied to their hardhat, or be clearly identified by some other system. Any new employee shall wear the designated SSE identifier until the PM determines the employee has the knowledge, skills, and ability related to the specific hazard on the project.

Driving and Vehicle Safety

The proper operation of vehicles is critical to protecting the safety of AECOM employees and subcontractors. Drivers face numerous hazards while operating vehicles. Some of the hazards include collision with another vehicle, collision with a fixed object, vehicle break-down or failure, or falling asleep or becoming otherwise incapacitated while driving. All employees and subcontractors will adhere to procedure S3AM-005-PR. The following safe driving practices shall be followed:

- ❖ Managers must authorize drivers following evaluation of driver criteria to drive and maintain an AECOM-owned, leased, or rented vehicle; a client or customer-owned vehicle; or a personal vehicle operated in the course of conducting AECOM business.
- ❖ AECOM employees may not use mobile communication devices, including hands-free technology. This restriction includes employees that use personal vehicles for company business.
- ❖ The driver shall conduct pre-trip vehicle inspections prior to each trip. A vehicle inspection checklist may be used to guide the inspection process.
- ❖ All drivers shall complete defensive driver training. Additional training (i.e., hands-on defensive driver training) may apply for medium and high-risk drivers; see Driving procedure S3AM-005-PR and SHE Training procedure S3AM-003-PR for more details.
- ❖ Drivers who are to undertake trips in excess of 250 miles (400 km) each way, drive in remote or hazardous areas, or when otherwise deemed necessary, shall develop and document a Journey Management Plan (JMP).

Fitness for Duty

One of AECOM's nine Life-Preserving Principles is Fitness for Duty (see Fitness for Duty procedure S3AM-008-PR). Fitness for duty means that individuals are in a state (physical, mental, and emotional) that enables them to perform assignments competently and in a manner that does not threaten the health and safety of themselves or others. On certain projects or for specific tasks, fit for duty certifications may be requested of medical providers by SHEMs or Human Resources (HR). Employees should report to work fit for duty and unimpaired by substances or fatigue. Supervisors must observe their employees and work with the employee, SHE staff, and HR to address deficiencies. AECOM will not tolerate retaliation against any employee for filing a complaint or concern regarding their fitness for duty or participating in any way in an investigation.

One aspect of fit for duty is fatigue management. AECOM has developed procedures that limit work periods or requires additional rest under certain circumstances, including during long-distance travel or when working at high altitudes. These

procedures also set limits on extended work periods of 14 hours per day or 60 hours per week. A fatigue management plan is required if longer working hours are necessary (see Fatigue Management procedure [S3AM-009-PR](#)).

Substance Abuse

Drug and alcohol abuse poses a serious threat to the health and safety of employees, clients, and the general public as well as the security of our job sites, equipment, and facilities. AECOM is committed to the elimination of illegal drug use and alcohol abuse in its workplace and regards any misuse of drugs or alcohol by employees to be unacceptable. AECOM policy ([S3AM-019-PR](#)) prohibits the use, possession, presence in the body, manufacture, concealment, transportation, promotion or sale of the following items or substances on company premises. Company premises refer to all property, offices, facilities, land, buildings, structures, fixtures, installations, aircraft, automobiles, vessels, trucks, and all other vehicles and equipment—whether owned, leased, or used.

- Illegal drugs (or their metabolites), designer and synthetic drugs, mood or mind altering substances, and drug use-related paraphernalia unless authorized for administering currently prescribed medication;
- Controlled substances that are not used in accordance with physician instructions or non-prescribed controlled substances; and
- Alcoholic beverages while at work or while on any customer- or AECOM-controlled property.

This policy does not prohibit lawful use and possession of current medication prescribed in the employees name or over-the-counter medications. Employees must consult with their health care provider about any prescribed medication's effect on their ability to perform work safely and disclose any restrictions to their supervisor.

Although some states may pass laws legalizing medical or recreational marijuana use, the use, sale, distribution, and possession of marijuana are violations of federal law and AECOM policy, and will subject an employee to disciplinary action up to and including termination in accordance with controlling law.

Ladders

S3AM-312-PR1

1. Purpose and Scope

To establish the minimum requirements for AECOM to use, handle, and store ladders.

This procedure applies to all AECOM Americas-based employees and operations and any other entity and its personnel contractually required to comply with this document's content.

2. Procedure

2.1 Roles and Responsibilities

Role	Responsibilities
Managers	1. Responsible for the implementation of this procedure and compliance with local regulations for supervised employees.
SH&E Managers	1. Provide guidance as to application of the procedure.
Employees	1. Adhere to this procedure, apply appropriate precautions and work practices in their use of ladders.

2.2 Training

2.3 Personal Protective Equipment (PPE)

- Personal fall protection equipment must be worn when working above the regulated height in your location. Refer to the *S3AM-208-PR1 Personal Protective Equipment* and *S3AM-304-PR1 Fall Protection* procedures for more specifics.
- PPE must be appropriate for the work location being constructed or industrial work site and/or client requirements.

2.4 Ladders General

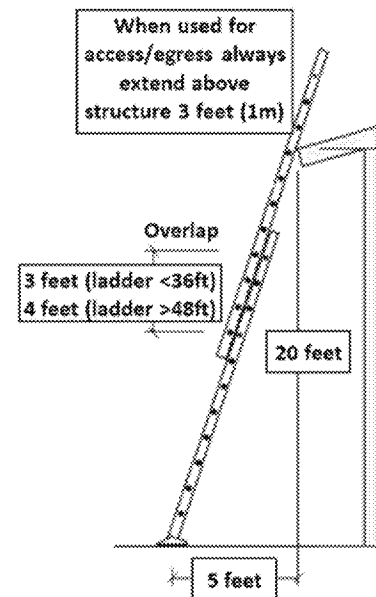
The following are minimum requirements for the use and care of ladders by AECOM personnel. Compliance with American National Standards Institute (ANSI) standards ANSI A14.1, ANSI A14.3, or Canadian Standard Association (CSA) standard CAN/CSA-Z11-M81 - Portable Ladders and applicable State, Provincial or Territorial regulations is also required. Additionally, consider the following:

- Ladders shall be visually inspected before use. If a ladder is broken, damaged, or defective, it shall be removed from service and tagged with an "unsafe equipment" tag until made safe for use or destroyed.
 - Ladders will be maintained in good condition at all times. All ladder rungs shall be evenly spaced and securely affixed to the side rails. Ladders shall not have loose, broken, or missing rungs, split side rails, or other defects.
 - During the inspection the type, size, length, and load rating (as well as labels and certification stickers) must be verified to ensure the ladder is correct for the work to be done.
 - Refer to the *S3AM-216-PR1 Compliance Assurance* procedure

- Ladders having metal parts (other than hardware) will not be used where potential electrical hazards exist unless they bear a manufacturer's label that indicates:
 - The ladder complies with ANSI 14.5 and CSA Z11-M81.
 - It is approved for electrical use.
 - Site-constructed ladders (vertical construction ladders, straight or job-built ladders) shall be built in accordance with State, Provincial or Territorial regulations.

2.4.1 Use of Ladders

- Evaluate the necessity of using a ladder. Confirm that the written scope of work requires the work to be performed and cannot be performed through other safer means
- Pre-determine the appropriate ladder type, construction; size; and, local supply options.
- Use the appropriate type of ladder for the work to be done according to manufacturer's specifications.
 - Ladders are not to be used as a brace, skid, guy or gin pole, gangway or other uses not specified by the manufacturer.
- Single and extension ladders shall be equipped with non-slip safety feet and secured from "kicking out" or slipping (e.g. tied off at the top and bottom, held and stabilized by another worker, or otherwise secured).
- Set up barricades or warnings around ladder if it must be set close to thoroughfares, passageway doors or high traffic locations.
 - A ladder will not be placed in front of a door opening toward the ladder unless the door is blocked open, locked, or guarded.
 - Ladders projecting into passageways or doorways where they can be struck by personnel, moving equipment, or materials must be protected by barricades or guards.
- Areas around the tops and bottoms of ladders shall be kept clear.
- Single rail ladders shall not be used.
- Set the ladder at the proper angle of one horizontal to every four vertical.
- Ladders shall rest on a surface of ample strength to support the load of the ladder and other applied loads. Ladders used for access shall extend 3 feet (1 meter) above the access level.
- Ladders should be set up on a firm level surface.
 - As applicable, use CSA/ANSI approved spike foot ladders for soft surfaces and non-slip foot ladders for hard, smooth surfaces
 - As applicable, if the base is to rest on soft, uncompacted or rough soil, a mudsill shall be used to stabilize the ladder.
- Ladders will not be placed on boxes, barrels, or other unstable bases to form longer sections.
- Do not paint or use painted wooden ladders as paint may hide unsafe wear and tear.
- Only one person shall be on a ladder at any time unless the ladder is designed for use of additional people.
- Always face the ladder when ascending or descending.
- Always maintain three points of contact with the ladder (i.e., two hands and one foot or two feet and one hand).
- Workers must ensure that their bodies are kept between the side rails of the ladder. Extending beyond the side rails or straddling a space between a ladder and another object will reduce the stability of the ladder.



- The Task Hazard Assessment shall consider potential fall hazards, any applicable regulatory requirement by jurisdiction and client requirements when determining whether fall protection must be in place or worn when working from portable ladders.
- Prior to using any ladder, ensure footwear is free of mud, snow, grease or other slippery materials.
- Check for overhead electrical conductors prior to setting up a ladder. Ensure that ladders do not come into contact with or encroach upon the minimum safe distances from energized electrical conductors.
- Do not use metal ladders or wire-reinforced wooden ladders in proximity to energized power lines or electrical equipment. When working near electrical equipment use only wood or fiberglass ladders approved for that use.
- Ladders shall be used for their intended purpose and must not be used horizontally as substitutes for scaffold planks, runways or other service for which they were not designed.
- Never carry materials, tools or other objects when ascending or descending from a ladder. Hoist lines or other appropriate methods should be used to transport materials from one work surface to another.
- Ladders will not be spliced together to form longer sections.
- At no time will a worker stand or sit on the top two rungs of any ladder.

2.5 Fixed Ladders

- Cage protection is required on fixed ladders of more than 20 feet (6.1 meters) or as specified by local jurisdiction.
- Landing platforms on fixed ladders shall be provided at heights specified by the given jurisdiction and be equipped with standard railings and toeboards, so arranged as to give safe access to the ladder.
- As permitted by the applicable jurisdiction, ladder safety climbing devices may be used in lieu of cage protection on fixed ladders or more in height.
 - Landing platforms are not required in these cases except at regular step-off points. All ladder safety devices will be compatible with the ladders with which they are used.
- Ladder safety climbing devices may be required in addition to cages as specified by jurisdictional legislation.

2.6 Portable Ladders

2.6.1 Ladder Types / Grades

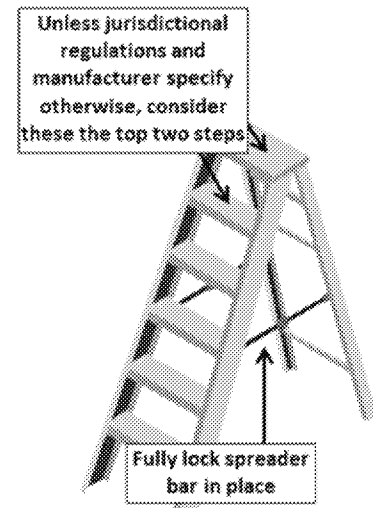
- The Occupational Safety and Health Administration, ANSI and CSA all have established “duty ratings” for portable ladders which identifies the conditions under which the ladder can be safely used. The following table generally describes these ratings:

TYPE / GRADE	MAX WORK LOAD	RATED USE	Notes: lbs = pounds kg = kilograms
Type IAA	375 lbs (170 kg)	Super Heavy Duty	
Type IA	300 lbs (136 kg)	Extra Heavy Duty	
Type I	250 lbs (113 kg)	Heavy Duty Industrial	
Type II	225 lbs (102 kg)	Medium Duty Commercial	
Type III	200 lbs (91 kg)	Light Duty Household	

- Ladders purchased for use on AECOM sites will be appropriate for industrial applications (Type IAA, IA, I, II). Light-duty household ladders (Type III) are not permitted.
- Ladder type / grade shall be selected according to the proposed task, the ladder’s load capacity, the expected load, and the task’s anticipated hazards to ensure suitability.

2.6.2 Step Ladders

- The stepladder must be in good condition and the right ladder type/grade for the job to be performed.
- Only use stepladders on clean, even surfaces.
- The platform and top step of ordinary types of stepladders will not be used as steps.
- Do not work from the top two steps of a stepladder. The pail shelf is not a step.
- Only use a stepladder in the fully opened position with the spreader bars locked.
- Do not use stepladders as supports for scaffolds or as a straight ladder.
- Stepladders may be used as a work platform; however, do not overreach while on a stepladder. Climb down and move the ladder to a new position.



2.6.3 Extension Ladders

- Extension ladders are to be used for access to a higher level only, not as a work platform.
- When extended, upper and lower sections of extension ladders must overlap a minimum of:
 - 3ft (1m) if combined sections total less than or equal to 36ft (11m).
 - 4ft (1.25m) if combined sections total 37ft to 48ft (11m-15m).
 - 5ft (1.5m) if combined sections total 49ft to 60ft (15m-18m).
- An extension ladder must be equipped with locks that hold the extension in place.
- Ladders must be tied off.
- Use polypropylene ropes on extension ladders that may be exposed to corrosive chemical.
- Keep both metal and wooden ladders away from electrical sources.
- Where a ladder is used for regular access and egress between levels, platforms should be provided at each landing area.
- The landing areas at both ends of the ladder must be clear of debris and other materials.
- The ladder should be set at the proper angle of one horizontal to every four vertical lengths.

2.6.4 Ladder Limits

- Single ladders shall not exceed the following limits (client or jurisdictional legislation may impose further restrictions):
 - Type IAA – 16 feet (5 meters).
 - Type IA – 30 feet (9 meters).
 - Type I – 30 feet (9 meters).
 - Type II – 24 feet (7.5 meters)
- Extension ladders shall not exceed the following limits (client or jurisdictional legislation may impose further restrictions):
 - Type IAA
 - 3 section length – 36 feet (11 meters)

- 2 section length – 32 feet (9.5 meters)
- Type IA
 - 3 section length – 72 feet (22 meters)
 - 2 section length – 60 feet (18 meters)
- Type I
 - 3 section length – 72 feet (22 meters)
 - 2 section length – 60 feet (18 meters)
- Type II
 - 3 section length – 60 feet (18 meters)
 - 2 section length – 48 feet (15 meters)
- Step ladders shall not exceed the following limits (client or jurisdictional legislation may impose further restrictions):
 - Type IAA – 12 feet (3.6 meters).
 - Type IA – 20 feet (6 meters).
 - Type I – 20 feet (6 meters).
 - Type II – 12 feet (3.6 meters)

2.6.5 Third Party Ladders

- The use of third-party ladders is discouraged.
 - If AECOM cannot use one of its own ladders for work that requires a ladder, each situation must be evaluated independently to determine the next best options.
 - In almost all situations, ladders should be rented or purchased by AECOM and only borrowed from a non-AECOM entity as a last resort after closely following the above process.
- Ladder safety depends in part on an employer's ability to have a competent employee inspect ladders for damage or other issues that make ladders unsafe for use. When borrowing ladders, AECOM may not be able to determine if ladders have been appropriately maintained or have the proper staff on-site to conduct such evaluations. Third parties may also not have the appropriate ladders for use (wrong type, use, load rating etc.) and may also have policies restricting the use by others. If borrowing a ladder is necessary:
 - Have a ladder borrowing discussion with the client, contractor or the third party from whom you are borrowing the ladder.
 - Assess storage, maintenance, and inspection practices of the non-AECOM ladder(s) to be used.
- Consult with SH&E if there are any questions or concerns.

2.6.6 Care of Ladders

- Ladders will be handled with care and not be subjected to abuse or misuse.
- Immediate inspection and appropriate maintenance is required of any ladder exposed to fire, subjected to damaging chemicals, involved in a fall or collision, or which has become coated with oil or grease. Refer to the *S3AM-216-PR1 Compliance Assurance*.
- When not in use, ladders will be stored where they are protected from potential damage caused by collision, temperature, moisture, etc.
- Users will return ladders to the proper storage location when the job is completed.

3. Help & Training

- All Employees who will climb above 6 feet (1.8 meters) shall take Fall Prevention / Protection Training. Refer to the *S3AM-304-PR1 Fall Protection* procedure.
- All Employees will be oriented to the hazards and controls of any ladders present on the site and be aware of the safety planning and Task Hazard Assessment (THA) in accordance with *S3AM-209-PR1 Risk Assessment & Management*.
- All Employees involved in the use of ladders on the project / location will be instructed in the requirements of this procedure.

4. Terms and Definitions

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| a. | Stepladder | A self-supporting portable ladder that is non-adjustable in length, with flat steps and hinged spreader design to connect the front and rear rails. It may be collapsed for ease of storage. It is intended for use by one person. |
| b. | Single Ladder | A non-self-supporting portable ladder that is non-adjustable in length, consisting of one section. It is intended for use by one person. |
| c. | Articulated Ladder | A portable ladder with one or more pairs of locking hinges which allow the ladder to be set up in several configurations such as a single or extension ladder, with or without a stand-off, a stepladder, a trestle ladder, scaffold or work table. |
| d. | Extension Ladder | A non-self-supporting portable ladder that is adjustable in length. It consists of two or more sections that travel in guides or brackets arranged so as to permit length adjustment. It is intended for use by one person. |
| e. | Fixed Ladder | A non-self-supporting ladder that is non-adjustable in length and permanently attached to a structure at a pitch ranging from 60 degrees to 90 degrees from the horizontal. The preferred pitch of a fixed ladder is between 75 degrees and 90 degrees from the horizontal. A fixed ladder is considered to be of "Substandard Pitch" if it is installed at an angle between 60 degrees and 75 degrees from the horizontal. Fixed ladders having a pitch greater than 90 degrees are not allowed. |
| f. | Job-Made Ladder | A custom, made-to-fit specific job situations during construction or demolition operations. Their primary purpose is to provide access to or egress from a work area. They are not intended to serve as a workstation. They are temporary in nature and serve only until a particular phase of work is completed or until permanent stairways or fixed ladders are ready for use. Job-made ladders must be in full compliance with local regulations. |

5. References

- a. S3AM-003-PR1 SH&E Training
- b. S3AM-216-PR1 Compliance Assurance
- c. S3AM-208-PR1 Personal Protective Equipment
- d. S3AM-209-PR1 Risk Assessment & Management
- e. S3AM-304-PR1 Fall Protection

6. Records

- a. None

7. Appendices

- a. None

8. Change Log

Rev #	Change Date	Description of Change	Location of Change
5	July 31, 2019	This version and previous versions changes noted in Edit Summary documents of the respective years.	
6	August 3, 2021	Moved content into current IMS Procedure Template. Added two new bullets to the beginning of Section 2.4.1. New Section 2.6.5 added	Section 2.4.1 and 2.6.5

Attachment **D**

Disclaimer

Attachment D: Disclaimer

This Safe Work Plan, and each of its provisions, is applicable only to, and for use only by, AECOM, its affiliates, and its subcontractors. Any use of this Plan by other parties, including, without limitation, third party contractors on industrial sites or projects where AECOM is providing engineering, construction management or similar services, without the express written permission of AECOM, will be at that party's sole risk, and AECOM Corporation shall have no responsibility therefore. The existence and use of this Plan by AECOM shall not be deemed an admission or evidence of any acceptance of any safety responsibility by AECOM for other parties unless such responsibility is expressly assumed in writing by AECOM in a specific project contract.